

Appl. No. 10/717,310
Amendment transmitted on September 1, 2005
Reply to Office action of May 4, 2005

REMARKS

Claims 1-5 are pending in the present application.

By the present amendment, claims 6-20, which the Examiner has withdrawn from consideration, have been canceled without prejudice to the filing of one or more divisional applications. These claims have been canceled in response to the Examiner's Restriction Requirement in the Office Action of March 11, 2005.

No new matter has been added.

The Present Invention

The present invention relates to crystalline precipitated calcium carbonate compositions, known as vaterite, which impart improved cleaning and abrasive characteristics when included within a toothpaste or dentifrice. It has now been discovered that RDA and PCR are dependent on the abrasive particle shape, primary particle size and the size of the particle aggregates. Indeed, by the present invention, abrasive vaterite has been developed that not only has excellent cleaning performance, but shows this cleaning performance at very low abrasiveness. Until now it had been thought that there was a linear relationship between RDA and PCR, so that a formulator has to balance the acceptable RDA level with the resulting PCR value. (Specification, Paragraphs 0022-0025).

REJECTION UNDER 35 U.S.C. §102

The Examiner has rejected claims 1-3 under 35 U.S.C. §102(b) as being anticipated by Goffin, U.S. Patent No. 5,290,353 ("Goffin"). The Examiner asserts that Goffin discloses a vaterite material having a particle size of less than 3 microns and having a size distribution factor of preferably less than 0.5. (Office Action of May 4, 2005, Page 3).

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For a claim to be rejected as anticipated under 35 U.S.C. §102, it must be shown that the prior art reference teaches or suggests all of the claimed elements and limitations. (M.P.E.P. §706.02).

Goffin discloses a substantially spherical vaterite material, with a grain size distribution factor of less than 1, preferable less than 0.5 and a particle size of less than 20 microns, preferably less than 10 microns. (Col. 1, line 65 – col. 2, line 5). As an example of the process, Goffin's example 1 produces a vaterite material composed almost entirely of particles with a particle size of less than 1. (Example 1, col. 4, line 47 – col. 5, line 55; Figure 1). As Goffin discloses these specialized vaterite particles are prepared by a process in which a mixture of particules containing calcium in the form of calcium oxide and/or hydroxide is treated in a reaction medium containing an acid salt of an organic amine with the pH of treatment having value higher than 10; then CO₂ is introduced in the medium so that the pH of the medium reaches a saturation pH, the value of which is about 0.83 times the pH of treatment and then CO₂ is introduced in the medium which is possibly stirred at a rate lower than 50 g CO₂/hour/liter so as to form substantially spherical vaterite especially having a predetermined size. (Col. 2, lines 17 –33). Giffon stipulates that the CO₂ is introduced in the medium when the CO₂ content of the medium is comprised between 0.3 and 1, and that the process may additionally comprise a step in which the calcium content is adjusted before the introduction of CO₂ into the medium. (Id.)

The present invention is not anticipated by Goffin, because Goffin fails to teach or disclose all of the elements of the present claims. In particular, Goffin does not

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teach an aggregate particle size of less than 4 microns. Indeed, Goffin explicitly states that its particles are *not* present in the form of aggregates: "[t]he process according to Goffin, especially the preparation process for obtaining a substantially spherical vaterite, not in the form of aggregates of particles." (Goffin, Col. 2, lines 10-14). The Examiner also acknowledges that Goffin fails to mention that its particles are arranged in aggregates, "Goffin et al. additionally teaches that the particles are not in the form of aggregates". (Office Action of May 4, 2005, Page 3).

On page 3 of the Office Action of May 4, 2005 the Examiner observes that: "[n]o difference is seen between the vaterite particles of Goffin et al. and those of the instantly claimed invention." Applicants submit that the presence of particles in an aggregate particle size of less than 4 microns, as recited in present claim 1, is one very clear and substantial difference between Goffin and the subject matter of the present claims, which the Examiner may wish to take note of.

The Examiner has rejected claims 4-5 under 35 U.S.C. §102(b) as being anticipated by Goffin. With respect specifically to claims 4-5, the Examiner acknowledges that the particles of Goffin do not have the abrasion values recited in the present claims, but nonetheless asserts that it would be expected that the particles of Goffin have the abrasion values within the recited ranges, because:

Where, as here, the claimed and prior art products are identical or substantially identical, or a produced by identical or substantially identical processes, the burden of proof is shifted to the applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product. See *In re Best*, 195 USPQ 430.

And additionally because:

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Where, as here, the reference discloses all the limitations of a claim except a property or function, and the Examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention, the burden of proof is shifted to the applicant, as in *re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

Applicants respectfully traverse the Examiner's rejection as follows.

First, Applicants believe that the Examiner has not properly applied the legal principles relating to inherency as set forth in M.P.E.P. §2112.

Second, even assuming, *in arguendo*, that the inherency requirements articulated by the Examiner in the Office Action of May 4, 2005 are a correct interpretation of the principle of inherency and anticipation, the Examiner has failed to make out a proper case for inherency even according to his own principles. For example, the paraphrased holding that the Examiner attributes to *in re Best*, requires that the Examiner show that the either the product itself or the process to produce it is identical or substantially identical. The Examiner has failed to make this showing. In fact, the Examiner has failed to make any showing supporting the assertion of inherency, except merely stating *in re Best* and paraphrasing the holding of the case.

The Examiner's failure to make a showing that either the product itself or the process to produce it is identical or substantially identical is particularly important in the present case because contrary to the purported identical nature between the particles taught by Goffin and the particles described in the present claims, Applicants have noted that the two sets of particles are actually quite different. In particular, the particles as described in the present invention form aggregates while the particles in Goffin do not form

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aggregates. This is a substantial differences and it means that the claimed subject matter and that of the prior art are not substantially identical.

Much the same can also be said for the paraphrased holding that the Examiner attributes to *in re Fitzgerald*, which requires that the prior art disclose all of the limitations of a claim except a property or function, before the Examiner can shift the burden of proof back to the Applicants to show that the prior art composition does not exhibit the same property or function. As noted above, Goffin is silent not only on the specific properties recited in present claims 4 and 5 (which the Examiner invokes the inherency argument for, e.g., the brass Einhehner abrasion values), but also specifically disclaims structural aspects recited in the present claims (the presence of the particles in an aggregate).

Because of these important and substantial differences between Goffin and the subject matter of claims 1-5, these claims meet the requirements for novelty established by 35 U.S.C. §102. Reconsideration and withdrawal of the rejection of these claims in view of Getz is respectfully requested.

REJECTION UNDER 35 U.S.C. §103

The Examiner has rejected claims 4-5 under 35 U.S.C. §103 as being unpatentable over Goffin.

Although stating that in the Office Action of May 4, 2005 the Examiner was relying on an obviousness rejection under 35 U.S.C. §103 in the alternative to his previously stated anticipation rejections, the Examiner provided no explanation at all of his obviousness rejection. If the Examiner wishes to maintain an obviousness rejection in view

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of Goffin, Applicants respectfully request for the Examiner to issue a new, non-final office action setting forth an explanation of the obviousness rejection.

CONCLUSION

Reconsideration and withdrawal of the rejection of the claims in view of the remarks provided herein and allowance of the claims being prosecuted are respectfully requested.

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Respectfully submitted,

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